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# Fuel Focus

*Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices*

2010 Annual Review

Canada

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# Fuel Focus

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## 2010 Annual Review

*Fuel Focus 2010 Annual Review* summarizes the events that characterized the Canadian retail gasoline market during 2010. Throughout the year the bi-weekly *Fuel Focus* report provides readers with regular information on the various aspects of the Canadian gasoline markets and the economic drivers influencing prices.

## Highlights

- Canadian retail gasoline prices in 2010 averaged $1.04 per litre, an increase of 9 cents per litre from 2009. Gasoline prices fluctuated within a narrow range of 15 cents per litre from a low of 98 cents per litre to a high of $1.13 per litre in 2010. In comparison, the range was 25 cents per litre from a low of 78 cents per litre to a high of $1.04 per litre in 2009.
- The year started with gasoline prices at $1.02 per litre, remained relatively flat throughout the summer driving season and ended in an upswing at $1.13 per litre—a 26-month high. In 2010, prices remained above 2009 levels for most of the year. However, the Canada average retail pump price of $1.04 per litre in 2010 was significantly lower than the average retail pump price of $1.14 per litre registered in 2008.
- Retail pump prices increased in 2010, compared to 2009, due to higher crude oil prices and also because of higher taxes in some provinces. Average refining and marketing costs and margins dropped slightly by 1 cent per litre helping to moderate the overall increase in gasoline prices.
- Canadian and American wholesale gasoline prices averaged approximately 62 and 60 cents per litre respectively in 2010, compared to 55 and 53 cents per litre respectively in 2009. Overall, average retail pump prices reflected the moderate upward pressure from North American wholesale gasoline prices and world crude oil prices.
- While Canadian refinery capacity has increased slightly over the last decade, refinery utilization rates have declined steadily since 2004. As in 2009, the rate of the decline was significant in 2010 because of lower demand for oil products, poor refining economics stemming from the economic downturn and planned and unplanned refinery shutdowns.
- Crude oil prices for the three crude oil benchmarks (Edmonton Par, WTI and Brent) averaged $506/m³ (US$78/bbl) in 2010—an increase of $76/m³ (US$17/bbl) from 2009. World crude oil prices remained relatively less volatile than in previous years mainly due to weak oil product demand and to a lackluster global economic recovery, relatively high U.S. crude oil and gasoline inventories for most of the year, low refinery utilization rates and large crude oil spare capacity.

**Figure 1: Crude Oil and Regular Gasoline Price Comparison (National Average)**

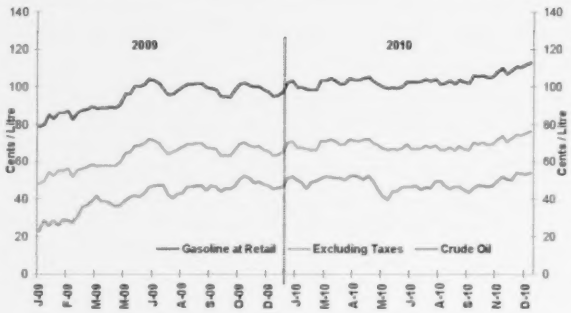
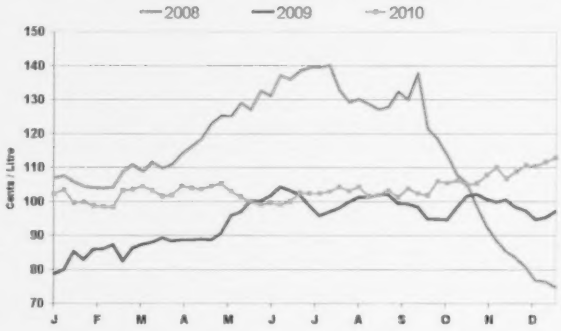



**Figure 2: Weekly Regular Gasoline Prices**




**Changes in Fuel and Crude Oil Prices**

| | Annual (National Average) | | |
|---|---|---|---|
| ¢/L | 2010 | 2009 | Change |
| Gasoline | 103.6 | 94.6 | +9.0 |
| Diesel | 100.8 | 89.6 | +11.2 |
| Furnace Oil | 88.8 | 76.2 | +12.6 |
| Crude Oil | 48.6 | 41.3 | +7.3 |

*Source: NRCan*

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## Retail Gasoline Overview

The annual average gasoline pump price in the selected cities shown in Figure 3 was $1.04 per litre in 2010—an increase of 9 cents per litre compared to 2009.

The increase in retail gasoline prices was primarily due to higher crude oil prices and taxes. Relatively stable demand for gasoline in North America, and high U.S commercial crude oil and petroleum product inventories contributed to lower price volatility. The global economic recovery remained fragile, putting downward pressure on the demand for petroleum products and in turn moderating prices.

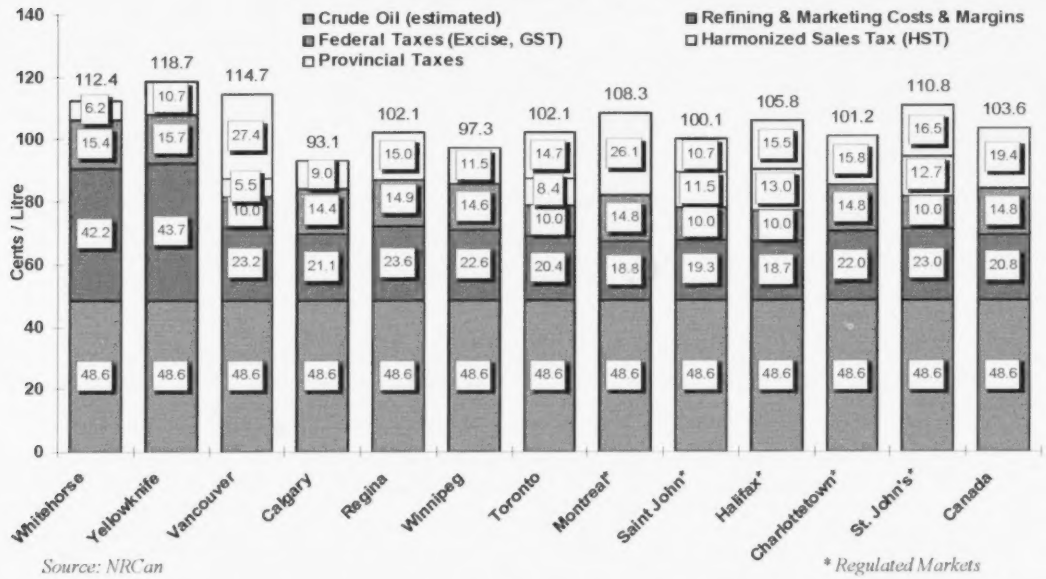
Crude oil, the main pump price component, averaged approximately 49 cents per litre in 2010—an increase of 7 cents per litre from the previous year.

Despite higher prices at the pump, the refining and marketing costs and margins component declined by 1 cent per litre in 2010 to 21 cents per litre.

In 2010, federal and provincial taxes accounted for 34 cents per litre of the average gasoline price at the pump, mainly due to the tax changes in a number of provinces. This represents nearly a 3 cent per litre increase from 2009.

Vancouver and Toronto average retail gasoline prices increased by 11 cents per litre, mainly due to higher overall taxes and crude oil costs, followed by Montreal and Halifax at 10 cents per litre. Winnipeg registered the lowest price increase at less than 4 cents per litre.

**Figure 3: Regular Gasoline Pump Prices in Selected Cities**
**Annual Average for 2010**




*Source: NRCan*

** Regulated Markets*

**Regular Gasoline Pump Price Components in Selected Cities**

Change in Annual Average for 2010 over 2009 (cents per litre)

| Selected Cities | WH | YK | VA | CY | RE | WG | TO | ML | SJ | HX | CH | SJ's | CA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Provincial Taxes | | | 4.0 | | | | | 2.5 | | | 0.6 | | 2.4 |
| HST | | | 5.5 | | | | 8.4 | | 0.9 | 1.9 | | 1.0 | |
| Federal Taxes | 0.7 | 0.3 | -4.9 | 0.2 | 0.3 | 0.1 | -4.4 | 0.4 | | | 0.3 | | 0.4 |
| R & M Costs and Margins | 5.4 | -1.3 | -0.8 | -2.1 | -2.3 | -3.8 | -0.8 | -0.3 | 0.2 | 0.3 | -0.5 | 0.1 | -1.1 |
| Crude Oil | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 |
| Retail Pump Prices | 13.4 | 6.3 | 11.1 | 5.4 | 5.3 | 3.6 | 10.5 | 9.9 | 8.4 | 9.5 | 7.7 | 8.4 | 9.0 |

Note: Empty fields indicate no changes from 2009 to 2010. Shaded areas indicate the tax is not applicable. Federal taxes include the excise tax and the GST where applicable. A number of provincial tax changes came into effect in 2010. For more information on the provincial tax changes, please consult the Fuel Focus Supplement Issue 8 of July 2, 2010, at: http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-05-07/index-eng.php#supsup

## Wholesale Gasoline Prices

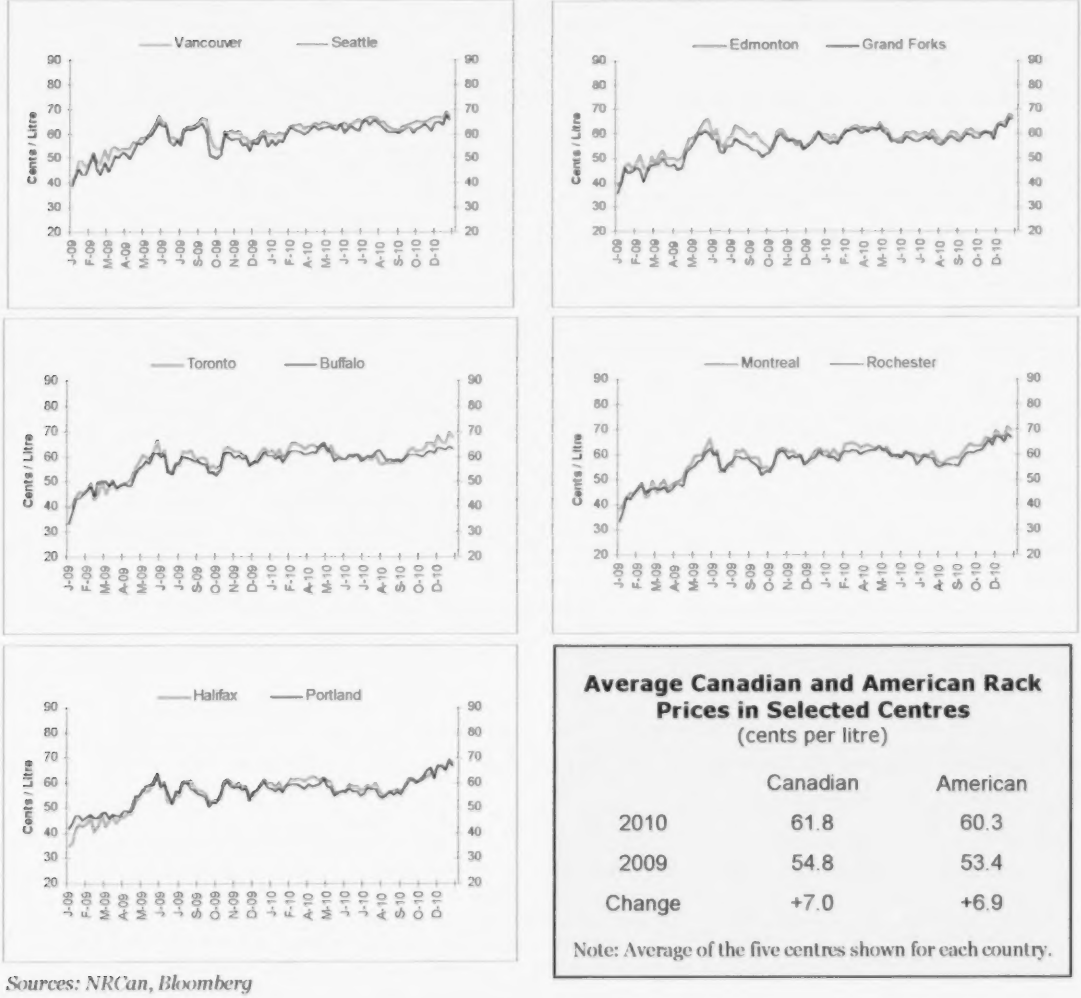
In 2010, wholesale gasoline prices in Canada and the U.S. followed similar trends, with the annual average in Canada at 62 cents per litre being slightly higher than the 60 cents per litre in the selected American centres.

Overall, price fluctuations were moderated by the gradual rise in world crude oil prices. Wholesale gasoline prices reflected the moderate increase in gasoline demand and the high gasoline inventories on the continental North American market.

Wholesale gasoline prices fluctuated between approximately 60 and 64 cents per litre in the Canadian markets and between 59 and 62 cents per litre in the competing U.S markets. The price differentials between certain Canadian and U.S. centres (e.g. Vancouver-Seattle; Toronto-Buffalo) were fairly stable during the year. By and large, Canadian and American wholesale gasoline prices followed each other closely.

Wholesale gasoline prices in all selected centres were above the 2009 level with increases ranging from 6 to 8 cents per litre.

**Figure 4: Wholesale Gasoline Prices** (Weekly Average)
Rack Terminals Prices for Selected Cities Ending December 30, 2010
(Can ¢/L)




**Average Canadian and American Rack Prices in Selected Centres**
(cents per litre)

| | Canadian | American |
|---|---|---|
| 2010 | 61.8 | 60.3 |
| 2009 | 54.8 | 53.4 |
| Change | +7.0 | +6.9 |

Note: Average of the five centres shown for each country.

*Sources: NRCan, Bloomberg*

## Refining and Marketing Margins

**Refining margins for gasoline** declined in 2010 compared to the previous year despite higher prices at the pump. Overall, compared to 2009, average refining margins decreased by less than 1 cent per litre to nearly 14 cents per litre in 2010.

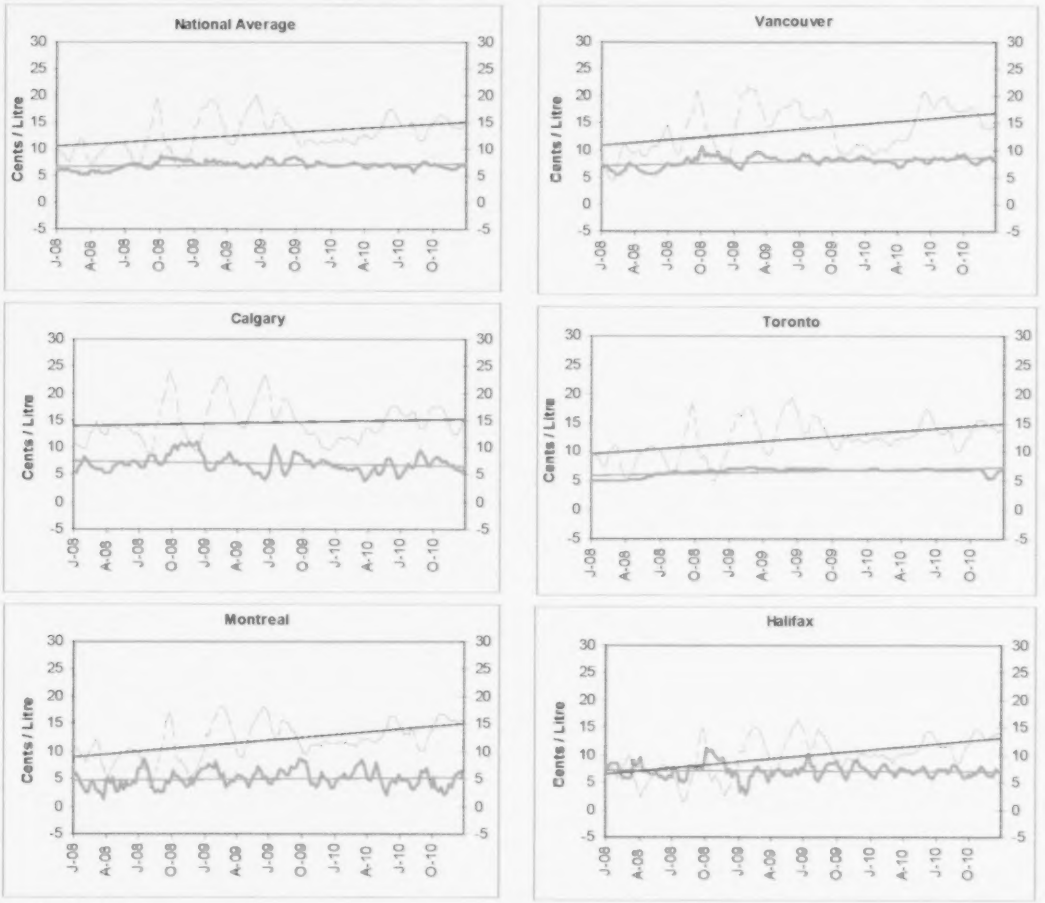
The **four-week rolling national average** refining margins ranged from a low of 11 cents per litre to a high of 17 cents per litre in 2010. In comparison, margins fluctuated in the range of 11 to 20 cents per litre in 2009.

Refinery margins remained relatively flat in the first four months of 2010. Margins spiked in June with the traditional summer driving season and again in the latter part of the year due to supply constraints in some regions. When supplies are tight, margins rise as markets adjust using higher prices as a mechanism to bring supply and demand into balance.

In 2010, there were few market supply constraints compared to the previous year when Western provinces experienced a number of refinery outages, maintenance and apportionment situations. Sufficient gasoline and crude oil inventories in the U.S. moderated the rise in refining margins along with a mostly balanced supply and demand situation.

By comparison, **marketing margins** fluctuated over a narrow range and were much more stable than refining margins. Nationally, the average margin decreased slightly from last year by less than 1 cent per litre to nearly 7 cents per litre. Vancouver registered the highest marketing margin at 8 cents per litre and Montreal the lowest at 5 cents per litre, while Halifax remained unchanged at 7 cents per litre.

**Figure 5: Refining and Marketing Margins** (Four-Week Rolling Average)
------- Refining Margin —— Marketing Margin




*Source: NRCan*

## Crude Oil Overview

The year 2010 was characterized by its uncommonly low world crude oil price volatility, compared to 2009 and some of the previous years. Crude oil prices rose in 2010, starting at $504/m³ (US$77/bbl) in January and ending the year at $561/m³ (US$89/bbl) in December. The elements which influenced crude oil in 2008, such as historically high prices, and the aftermath of the economic downturn in 2009 continued to dampen the demand for oil products throughout 2010 and consequently moderated the rise in crude oil prices.

In 2010, crude oil prices for the three crude oil benchmarks (Edmonton Par, WTI and Brent) averaged $506/m³ (US$78/bbl) an increase of $76/m³ (US$17/bbl) from 2009. The following is a summary of the more significant events affecting the price of crude oil in 2010.

**Slightly Stronger World Crude Oil Prices in 2010 Despite Continued Weak Demand:** The striking element of oil markets in 2010 was its relatively low volatility. Although the global economy showed signs of improvement, overall demand for crude oil and petroleum products remained relatively weak. The absence of geopolitical conflicts in oil-bearing regions and of weather-related events near oil and refinery infrastructures contributed to reduced oil price volatility. Overall, much of the crude oil prices increase in 2010 was partly offset by the weak demand for refined petroleum products in 2009 stemming from anemic global economic activities.

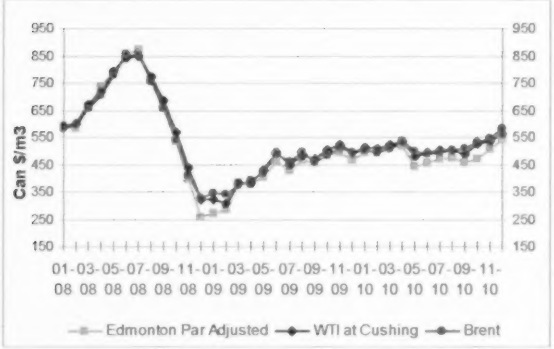
**The U.S. Dollar**: At times during the year crude oil prices rose as the U.S. dollar weakened and investors looked to crude oil and other commodities as relatively safe places to put their money. At other times, the strengthening of the U.S. dollar helped push crude prices down, as investors who bought crude oil as a hedge against inflation when the dollar weakened, sold when the dollar was stronger. For Canadian consumers, an appreciating Canadian dollar relative to the U.S. currency meant that they reaped some of the benefits of buying petroleum products produced from oil priced in U.S. dollars.

**Refinery Utilization Rates**: Overall, while Canadian refinery capacity has increased slightly over the last decade, utilization rates have declined steadily since 2004. As in 2009, the rate of the decline was significant in 2010 because of lower demand for oil products, poor refining economics stemming from the economic downturn and planned and unplanned refinery shutdowns. In 2009, industry utilization rates averaged 79% compared to 73% in 2010—the lowest in a decade. In October 2010, Shell Canada completed the process of shutting down its Montreal East refinery which will next be converted into a fuel distribution terminal.

**U.S. Inventories**: Overall, U.S. crude oil inventories remained well above the 5-year average range for most of the year, which further contributed to greater stability in world crude oil prices. The build-up in U.S. gasoline inventories during what has always been the peak driving season, further contributed to moderate the increase in oil prices. Crude oil and product inventories remained strong worldwide. The French refinery workers strike in September 2010, would normally have caused a spike in oil and product prices, but did not. This indicates how much the oil product markets have changed since the economic crisis, and how ample inventories provide a cushion which covers these sorts of disruptions.

**World Demand Forecasts:** Various international organizations, such as the International Energy Agency, the U.S. Energy Information Administration (EIA), and the Organization of Petroleum Exporting Countries project moderate growth within the Organization for Economic Cooperation and development (OECD) countries. According to the EIA, non-OECD regions, especially China, the Middle East, and Brazil, represent most of the expected growth in world oil consumption in 2011.

**Figure 6: Crude Oil Price Comparisons**




**Changes in Crude Oil Prices**

| Crude Oil Types | Annual | | | | | |
|---|---|---|---|---|---|---|
| | 2010 | | 2009 | | Change | |
| | $Can/m³ | $US/bbl | $Can/m³ | $US/bbl | $Can/m³ | $US/bbl |
| Edmonton Par | 487.71 | 75.31 | 414.72 | 58.53 | +72.99 | +16.78 |
| WTI | 514.51 | 79.45 | 437.18 | 61.68 | +77.33 | +17.77 |
| Brent | 516.45 | 79.77 | 439.15 | 61.89 | +77.30 | +17.88 |

## Taxes on Gasoline and Other Fuels - December 31, 2010
**(Cents/Litre)**

| | Gasoline | Diesel | Propane (motor vehicle) | Furnace Oil/ Natural Gas (for heating) |
|---|---|---|---|---|
| **Federal Taxes** | | | | |
| Excise Tax | 10.0 | 4.0 | - | - |
| Goods and Services Tax | 5% | 5% | 5% | 5% |
| OR: Harmonized Sales Taxes[1] in: Newfoundland-Labrador, Ontario and New Brunswick | 13% | 13% | 13% | 13% |
| Nova Scotia [2] | 15% | 15% | 15% | 5% |
| British Columbia[3] | 5% | 5% | 12% | 5% |
| **Provincial Taxes** | | | | |
| Newfoundland and Labrador | 16.5 | 16.5 | 7.0 | |
| Prince Edward Island [4] | 15.8 | 20.2 | | |
| Nova Scotia | 15.5 | 15.4 | 7.0 | |
| New Brunswick | 10.7 | 16.9 | 6.7 | |
| Quebec [5] | 16.2 | 17.2 | | |
| Quebec Sales Tax | 7.5% | 7.5% | 7.5% | 7.5% |
| Ontario | 14.7 | 14.3 | 4.3 | |
| Manitoba | 11.5 | 11.5 | 3.0 | |
| Saskatchewan | 15.0 | 15.0 | 9.0 | |
| Alberta | 9.0 | 9.0 | 6.5 | |
| British Columbia [6] | 14.5 | 15.0 | 2.7 | |
| Additional Carbon Tax | 4.45 | 5.11 | 3.08 | 5.11/2.85 |
| Yukon | 6.2 | 7.2 | | |
| Northwest Territories [7] | 10.7/6.4 | 9.1 | | |
| Nunavut [7] | 10.7/6.4 | 9.1 | | |
| **Transportation Taxes** (in addition to federal and provincial taxes) | | | | |
| Montreal [5] | 3.0 | | | |
| Vancouver [6] | 9.0 | 9.0 | | |
| Victoria [6] | 2.5 | 2.5 | | |

**Notes:**

1. In Newfoundland and Labrador (NL), New Brunswick (NB), Nova Scotia (NS), Ontario (ON) and British Columbia (BC), the Goods and Services Tax (GST) and the provincial retail sales taxes are replaced by a single, harmonized value-added tax, the Harmonized Sales Tax (HST). Rates vary by province.

2. NS has a point of sale tax rebate of the provincial portion of the HST (8%) on furnace oil.

3. BC has a point of sale rebate of the provincial portion (7%) of the HST on gasoline, diesel and heating fuels.

4. In Prince Edward Island (PEI) the gasoline and diesel taxes are adjusted monthly. More detailed information is available on PEI's website at http://www.taxandland.pe.ca/index.php3?number=78503&lang=E.

5. In QC, gasoline, diesel and propane taxes are reduced by varying amounts in certain remote areas and within 20 kilometres of the provincial and U.S. borders. The QC provincial retail sales tax (QST), which is set to increase to 8.5% on January 1, 2011, applies to all petroleum products. An urban tax of 3.0 cents per litre is also added to gasoline sold in Montreal and surrounding municipalities.

6. BC applies a carbon tax on all fuels. In the Greater Vancouver and Victoria areas, there are additional transportation taxes of 9.0 and 2.5 cents per litre, respectively, on gasoline and diesel. More information is available on BC's website at http://www.sbr.gov.bc.ca/business/Consumer_Taxes/consumer_taxes.htm.

7. In the Northwest Territories and Nunavut, gasoline is taxed at 6.4 cents per litre in communities not served by a highway system.

***The order on how taxes are applied:*** *excise + provincial + transportation + carbon + GST/HST. In Quebec the QST is in addition to all other taxes.*

# 2010 Fuel Focus Supplements

The following provides an index of the information and analysis provided as Supplements in the Fuel Focus Reports throughout the year. To view the full content of each Supplement, please follow the link.

**Historical Gasoline Prices over the Last 29 Years Adjusted for Inflation**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-01-29/index-eng.php#supplement

**World Average Gasoline Prices – 2009**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-03-12/index-eng.php#supsup

**Consumption Taxes on Gasoline**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-05-07/index-eng.php#supsup

**Automatic Temperature Compensation and the Retail Sale of Gasoline and Diesel Fuel**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-06-18/index-eng.php#supsup

**Consumption Taxes on Diesel and Propane Fuels**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-07-02/index-eng.php#supsup

**Review of Selected Issues Affecting the Price of Crude Oil**

http://nrcan.gc.ca/eneene/sources/pripri/reprap/2010-11-05/index-eng.php#supsup

**Current and historical Fuel Focus Reports are available at:**

http://nrcan.gc.ca/eneene/sources/pripri/latder-eng.php